

Claims

1. Method for performing audio and video presentation or reproduction including the steps of:
 - 5 - receiving a data stream including video and audio streams;
 - separating said data stream into video and audio streams;
 - timestamping audio data packets of said audio stream by
10 first processing means and forwarding audio data packets to second processing means configured to receive audio data packets;
 - determining a local system time of said second processing means;
 - 15 - calculating time periods for the transmission of audio data packets from said first processing means to said second processing means, based on said local system time and said timestamps of the audio data packets;
 - synchronising audio and video presentation or reproduction
20 tion based on said calculated transmission time periods.
2. Method according to claim 1, wherein timestamping of the audio data packets by the first processing means is performed using an internal time clock of the first processing means.
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3. Method according to claim 1 or 2, wherein the time reference of the audio presentation or reproduction is obtained by subtracting the transmission time period from
30 the local time of the second processing means.
4. Method according to one of claims 1 to 3, wherein the calculation of a transmission time period is based on a plurality of audio data packets sent from the first
35 processing means to the second processing means.

5. Method according to one of claims 1 to 4 wherein, when calculating said transmission time periods, the calculated transmission time periods are median filtered in order to obtain a mean transmission time period,
5 wherein, as an option, the length of said median filtering is changed dynamically, starting with a pre-defined first number of input transmission time period values and increasing in conformity with the number of further received transmission time period values, up to a pre-
10 defined maximum number of input transmission time period values.
6. Method according to claim 5, wherein said mean transmission time period is used for synchronisation of audio
15 and video presentation or reproduction.
7. Method according to claims 5 or 6, wherein the accumulated transmission time period values are sorted for said filtering.
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8. System for performing audio and video presentation or reproduction including:
- means for receiving a data stream including video and audio streams;
 - 25 - means for separating said data stream into video and audio streams;
 - means for timestamping audio data packets of said audio stream by first processing means and forwarding audio data packets to second processing means configured to
30 receive audio data packets;
 - means for determining a local system time of the second processing means;
 - means for calculating time periods for the transmission of audio data packets from the first processing means to
35 the second processing means, based on the local system time and said timestamp of the audio data packets;

- means for synchronising audio and video presentation or reproduction based on said calculated transmission time periods.

5 9. System according to claim 8 wherein, when calculating said transmission time periods, the calculated transmission time periods are median filtered in order to obtain a mean transmission time period, wherein, as an option, the length of the median filter is changed dynamically, starting with a pre-defined first number of input trans-
10 mission time period values and increasing in conformity with the number of further received transmission time period values, up to a pre-defined maximum number of input transmission time period values.

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10. Computer-readable storage medium holding code for performing the steps of:

- receiving a data stream including video and audio streams;
- 20 - separating the said data stream into video and audio streams;
- timestamping audio data packets of said audio stream by first processing means and forwarding audio data packets to second processing means configured to receive audio
25 data packets;
- determining a local system time of the second processing means;
- calculating time periods for the transmission of audio data packets from the first processing means to the sec-
30 ond processing means, based on the local system time and said timestamps of the audio data packets;
- synchronising audio and video presentation or reproduction based on said calculated transmission time periods.